

## ABSTRACT

In a personal identification device using blood vessel patterns, means capable of downsizing the device is especially provided. The personal identification device comprises an infrared ray source and a light receiving element row containing a plurality of light receiving elements. In personal identification, a finger is passed over the light receiving element row. An image containing a two-dimensional blood vessel pattern of the finger is created from an output of the light receiving element row and displacement information of the passing finger. The blood vessel pattern thus obtained is checked for a match with a previously registered pattern to perform the personal identification. The device can be downsized and can be easily mounted in a place having a limited mounting space, such as in cars and cell phones.